

CLAIMS

WHAT IS CLAIMED IS:

1. A method for providing intelligent caching, the method comprising:
analyzing a traffic stream for content;
outputting a profile of the content based upon the analyzing step, wherein the profile is used to prepare a master profile; and
caching content that is associated with the master profile.
2. The method of claim 1, further comprising:
receiving the content associated with the master profile over a wide area network (WAN).
3. The method of claim 2, wherein the WAN is a satellite network that supports a multicast communications session.
4. The method of claim 1, wherein the caching step is executed to pre-load a cache.
5. The method of claim 4, further comprising:
periodically refreshing the cache with content of a new master profile.
6. The method of claim 1, wherein the outputting step comprises:
prioritizing the content based upon popularity.
7. The method of claim 1, further comprising:
restricting access only to content that is associated with the master profile.
8. The method of claim 1, wherein the profile in the outputting step is categorized according to predetermined content communities.
9. A method for providing intelligent caching, the method comprising:
receiving a profile that is prepared based upon content of a traffic stream;
generating a master profile based upon the received profile; and
transmitting content associated with the master profile to a remote cache.
10. The method of claim 9, wherein the content associated with the master profile is transmitted over a wide area network (WAN).

11. The method of claim 10, wherein the WAN is a satellite network that supports a multicast communications session.

12. The method of claim 9, wherein the master content associated with the master profile is pre-loaded in the remote cache.

13. The method of claim 9, further comprising:
generating a new master profile; and
periodically refreshing the remote cache with content associated with the new master profile.

14. The method of claim 9, wherein the generating step comprises:
prioritizing the content based upon popularity.

15. The method of claim 9, wherein the master profile is used to restrict access to content.

16. A communications system for providing intelligent caching, the system comprising:
a first caching logic configured to analyze a traffic stream for content and to output a first profile of the content; and

a second caching logic configured to generate a second profile based upon the first profile, wherein the second profile is used to retrieve content.

17. The system of claim 16, wherein the content associated with the second profile is transmitted over a wide area network to a remote cache.

18. The system of claim 17, wherein the WAN is a satellite network that supports a multicast communications session.

19. The system of claim 17, wherein the remote cache is pre-loaded with the content associated with the second profile.

20. The system of claim 17, wherein the remote cache is periodically refreshed with content associated with a new master profile.

21. The system of claim 16, wherein the content of the first profile and the content associated with the second profile are prioritized based upon popularity.

22. The system of claim 16, wherein the second profile is used to restrict access to content.

23. The system of claim 16, wherein the first profile is categorized according to predetermined content communities.

24. A network device for providing intelligent caching services, comprising:
a processor configured to analyze a traffic stream for content and to output a profile of the content, wherein the profile is used to prepare a master profile; and
a cache coupled to the processor and configured to store content that is associated with the master profile.

25. The device of claim 24, further comprising:
a communications interface configured to receive the content associated with the master profile over a wide area network (WAN).

26. The device of claim 25, wherein the WAN is a satellite network that supports a multicast communications session.

27. The device of claim 24, wherein the cache is pre-loaded with the content that is associated with the master profile.

28. The device of claim 27, wherein the cache is periodically refreshed with content of a new master profile.

29. The device of claim 24, wherein the content of the profile and the content associated with the master profile are prioritized based upon popularity.

30. The device of claim 24, wherein the processor is further configured to restrict access only to content that is associated with the master profile.

31. The device of claim 24, wherein the profile is categorized according to predetermined content communities.

32. A network device for providing intelligent caching, the device comprising:
a communications interface configured to receive a profile that is prepared based upon content of a traffic stream; and
a processor coupled to the communications interface and configured to generate a master profile based upon the received profile, wherein the content associated with the master profile is transmitted over the communications interface to a remote cache.

33. The device of claim 32, wherein the communications interface is configured to interface with a wide area network (WAN).

34. The device of claim 33, wherein the WAN is a satellite network that supports a multicast communications session.

35. The device of claim 32, the content associated with the master profile is pre-load in the remote cache.

36. The device of claim 32, wherein the processor is further configured to generate a new master profile, the remote cache being periodically refreshed with content associated with the new master profile.

37. The device of claim 32, wherein the content of the profile and the content associated with the master profile are prioritized based upon popularity.

38. The device of claim 32, wherein the master profile is used to restrict access to content.

39. A network apparatus for providing intelligent caching, the apparatus comprising:
means for analyzing a traffic stream for content;
means for outputting a profile of the content, wherein the profile is used to prepare a master profile; and

means for caching content that is associated with the master profile.

40. The apparatus of claim 39, further comprising:
means for receiving the content associated with the master profile over a wide area network (WAN).

41. The apparatus of claim 40, wherein the WAN is a satellite network that supports a multicast communications session.

42. The apparatus of claim 39, wherein the caching means is pre-loaded with the content that is associated with the master profile.

43. The apparatus of claim 42, further comprising:
means for periodically refreshing the caching means with content of a new master profile.

44. The apparatus of claim 39, further comprising:
means for prioritizing the content based upon popularity.

45. The apparatus of claim 39, further comprising:

means for restricting access only to content that is associated with the master profile.

46. The apparatus of claim 39, wherein the profile is categorized according to predetermined content communities.

47. A computer-readable medium carrying one or more sequences of one or more instructions for providing intelligent caching, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

analyzing a traffic stream for content;

outputting a profile of the content based upon the analyzing step, wherein the profile is used to prepare a master profile; and

caching content that is associated with the master profile.

48. The computer-readable medium of claim 47, further comprising computer-executable instructions for causing the one or more processors to perform the step of:

receiving the content associated with the master profile over a wide area network (WAN).

49. The computer-readable medium of claim 48, wherein the WAN is a satellite network that supports a multicast communications session.

50. The computer-readable medium of claim 47, wherein the caching step is executed to pre-load a cache.

51. The computer-readable medium of claim 50, further comprising computer-executable instructions for causing the one or more processors to perform the step of:

periodically refreshing the cache with content of a new master profile.

52. The computer-readable medium of claim 47, wherein the outputting step comprises: prioritizing the content based upon popularity.

53. The computer-readable medium of claim 47, further comprising computer-executable instructions for causing the one or more processors to perform the step of:

restricting access only to content that is associated with the master profile.

54. The computer-readable medium of claim 47, wherein the profile in the outputting step is categorized according to predetermined content communities.

55. A computer-readable medium carrying one or more sequences of one or more instructions for providing intelligent caching, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

receiving a profile that is prepared based upon content of a traffic stream;
generating a master profile based upon the received profile; and
transmitting content associated with the master profile to a remote cache.

56. The computer-readable medium of claim 55, wherein the content associated with the master profile is transmitted over a wide area network (WAN).

57. The computer-readable medium of claim 56, wherein the WAN is a satellite network that supports a multicast communications session.

58. The computer-readable medium of claim 55, wherein the master content associated with the master profile is pre-loaded in the remote cache.

59. The computer-readable medium of claim 55, further comprising computer-executable instructions for causing the one or more processors to perform the steps of:

generating a new master profile; and
periodically refreshing the remote cache with content associated with the new master profile.

60. The computer-readable medium of claim 55, wherein the generating step comprises: prioritizing the content based upon popularity.

61. The computer-readable medium of claim 55, wherein the master profile is used to restrict access to content.